



PTO/SB/08A (08-03)

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **1** of **11****Complete if Known**

Application Number	09/970,122
Filing Date	October 2, 2001
First Named Inventor	Hou-Pu Chou
Art Unit	1753
Examiner Name	Arun S. Phasge
Attorney Docket Number	20174C-002510US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
AJP	A1	US-3,570,515	03-16-1971	Kinner	
	A2	US-3,747,628	07-24-1973	Holster et al.	
	A3	US-4,046,159	09-06-1977	Pegourie	
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	A13	US-5,126,115	06-30-1992	Fujita et al.	
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	A28	US-5,642,015	08-24-1997	Whitehead et al.	

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Signature

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Date
Considered

1/17/06

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AP	A29	US-5,659,171	08-19-1997	Young et al.	
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	A31	US-5,681,024	10-28-1997	Lisec et al.	
	A32	US-5,705,018	01-08-1998	Hartley	
	A33	US-5,759,014	06-02-1998	Van Lintel	
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	A39	US-5,876,187	03-02-1999	Afromowitz	
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	A47	US-6,296,873 B1	10-02-2001	Santarsiero et al.	
	A48	US-2001/0027745 A1	10-11-2001	Weigl et al.	
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	A50	US-6,409,832 B2	06-25-2002	Weigl et al.	
	A51	US-6,767,706 B2	07-27-2004	Quake et al.	

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		Art Unit	1753		
		Examiner Name	Arun S. Phasge		
Sheet	3	of	11	Attorney Docket Number	20174C-002510US

FOREIGN PATENT DOCUMENTS								
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
ASG	B1	EP	0 592 094	A2	04-13-1994	International Business Machines Corporation		<input type="checkbox"/>
	B2	EP	0 703 364	A1	03-27-1998	Fraunhofer-Gesellschaft Zur Förderung Der Angewandten Forschung E.V.		<input type="checkbox"/>
	B3	EP	0 706 004	A2	04-10-1998	Bayer Corporation		<input type="checkbox"/>
	B4	EP	0 779 438	A2	06-18-1997	Frank T. Hartley		<input type="checkbox"/>
	B5	EP	0 829 360	A2	03-18-1998	Xerox Corporation		<input type="checkbox"/>
	B6	EP	0 845 603	A1	06-03-1998	Xerox Corporation		<input type="checkbox"/>
	B7	EP	0 999 055	A2	05-10-2000	Samsung Electronics Co., Ltd.		<input type="checkbox"/>
	B8	GB	2 155 152	A	09-18-1985	Allied Corporation		<input type="checkbox"/>
	B9	GB	2 308 460	A	06-25-1997	Daewoo Electronics Co., Ltd.		<input type="checkbox"/>
	B10	WO	98/07069	A1	02-19-1998	The Regents Of The University Of Michigan		<input type="checkbox"/>
	B11	WO	99/00655	A2	01-07-1999	Immunetics		<input type="checkbox"/>
	B12	WO	99/04381	A1	01-28-1999	Diversified Scientific, Inc.		<input type="checkbox"/>
	B13	WO	99/17093	A1	04-08-1999	The Regents Of The University Of Michigan		<input type="checkbox"/>
	B14	WO	99/52633	A1	10-21-1999	Luminal Technologies, L.P.		<input type="checkbox"/>
	B15	WO	00/00678	A1	01-06-2000	University Of Washington		<input type="checkbox"/>
	B16	WO	00/43748	A1	07-27-2000	YSI Incorporated		<input type="checkbox"/>
	B17	WO	00/60345	A1	10-12-2000	University Of Alabama At Birmingham Research Foundation		<input type="checkbox"/>
	B18	WO	01/09595	A2	02-08-2001	Emerald Biostructures, Inc.		<input type="checkbox"/>
ASG	B19	WO	01/09595	A3	02-08-2001	Emerald Biostructures, Inc.		<input type="checkbox"/>

Examiner Signature	<i>ASG</i>	Date Considered	1/17/06
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PTO/SB/08B (08-03)

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		Filing Date	October 2, 2001
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		Art Unit	1753
		Examiner Name	Arun S. Phasge
		Attorney Docket Number	20174C-002510US
Sheet	4	of	11

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
AJP	C1	"Biochips," Nature Biotechnology, Vol. 18, Supplement 2000, pp. IT43-IT44, 2000	
	C2	"Chapter 9: Microfluidic Devices," Micromachined Transducers Sourcebook, pp. 779-882, 1998	
	C3	"Last Chance For Micromachines," The Economist Technology Quarterly, printed from website http://www.economist.com/science/displayStory.cfm?Story_ID=442930 on 1/25/2001, 8 pages, 12/7/2000	
	C4	AHN, CHONG H. et al., "Fluid Micropumps Based On Rotary Magnetic Actuators," Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95), Amsterdam, Netherlands, pp. 408-412, 1/29-2/2/1995	
	C5	ANDERSON, ROLFE C. et al., "Microfluidic Biochemical Analysis System," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 477-480, 6/16-19/1997	
	C6	ANGELL, JAMES B. et al., "Silicon Micromechanical Devices," Scientific American, pp. cover, 44-55, 4/1983	
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	C8	BALLANTYNE, J. P. et al., "Selective Area Metallization By Electron-Beam Controlled Direct Metallic Deposition," J. Vac. Sci. Technol., Vol. 10, No. 6, pp. 1094-1097, 11/1973	
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	C10	BLOOMSTEIN, T. M. et al., "Laser-Chemical Three-Dimensional Writing For Microelectromechanics And Application To Standard-Cell Microfluidics," J. Vac. Sci. Technol. B, Vol. 10, No. 6, pp. 2671-2674, 11/1992	
	C11	BOUSSE, LUC et al., "Electrokinetically Controlled Microfluidic Analysis Systems," Annu. Rev. Biophys. Biomol. Struct., Vol. 29, pp. 155-181, 2000	
	C12	BRECHTEL, R. et al., "Control Of The Electroosmotic Flow By Metal-Salt-Containing Buffers," Journal of Chromatography A, Vol. 716, pp. 97-105, 1995	
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Examiner Signature	<i>A. Phasge</i>	Date Considered	11/17/06
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AP	C15	CALKINS, KATHRYN, "Mycometrix: Rubber Chips," BioCentury, 2 pages, 10/16/2000	
	C16	CHIU, DANIEL T. et al., "Patterned Deposition Of Cells And Proteins Onto Surfaces By Using Three-Dimensional Microfluidic Systems," PNAS, Vol. 97, No. 6, pp. 2408-2413, 3/14/2000	
	C17	CHOU, HOU-PU et al., "A Microfabricated Device For Sizing And Sorting DNA Molecules," Proc. Natl. Acad. Sci., Vol. 96, pp. 11-13, 1/1999	
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	C19	CHOU, HOU-PU et al., "Integrated Elastomer Fluidic Lab-On-A-Chip-Surface Patterning And DNA Diagnostics," Proceedings of the Solid State Actuator and Sensor Workshop, Hilton Head, South Carolina, 4 pages, 2000	
	C20	CHOU, HOU-PU et al., "Multiple Disease Diagnostics On A Single Chip," Biophysics Lab, Caltech, pp. 1-4, 3/1/2000	
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	C25	EFFENHAUSER, CARLO S. et al., "Integrated Capillary Electrophoresis On Flexible Silicone Microdevices: Analysis Of DNA Restriction Fragments And Detection Of Single DNA Molecules On Microchips," Analytical Chemistry, Vol. 69, No. 17, pp. 3451-3457, 9/1/1997	
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	C28	FAHRENBERG, J. et al., "A Microvalve System Fabricated By Thermoplastic Molding," J. Micromech. Microeng., Vol. 5, pp. 169-171, 1995	
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AJP	C45	HOSOKAWA, KAZUO et al., "Handling Of Picoliter Liquid Samples In A Poly(dimethylsiloxane)-Based Microfluidic Device," Analytical Chemistry, Vol. 71, No. 20, pp. 4781-4785, 10/15/1999	
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	C49	JERMAN, HAL, "Electrically-Activated, Normally-Closed Diaphragm Valves," Transducers '91, 1991 International Conference on Solid-State Sensors and Actuators, pp. cover, 1045-1048, 1991	
	C50	JO, BYUNG-HO et al., "Fabrication Of Three-Dimensional Microfluidic Systems By Stacking Molded Polydimethylsiloxane (PDMS) Layers" SPIE, Vol. 3877, pp. 222-229, 9/1999	
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	C53	KAGAN, C. R., "Organic-Inorganic Hybrid Materials As Semiconducting Channels In Thin-Film Field-Effect Transistors," Science, Vol. 286, pp. 945-947, 10/29/1999	
	C54	KAPUR, RAVI et al., "Fabrication And Selective Surface Modification Of 3-Dimensionally Textured Biomedical Polymers From Etched Silicon Substrates," Journal of Biomedical Materials Research, Vol. 33, pp. 205-216, 1996	
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	C58	KIM, ENOCH et al., "Polymer Microstructures Formed By Moulding In Capillaries," Nature, Vol. 376, pp. 581-584, 8/17/1995	
	C59	KIRK-OTHMER, "Concise Encyclopedia of Chemical Technology," John Wiley & Sons, 5 pages, no date	
AJP	C60	KNIGHT, JAMES et al. "Hydrodynamic Focusing on a Silicon Chip: Mixing Nanoliters in Microseconds" Am. Phys. Soc., 27 April 1998, pp. 3863-3866, Vol. 80, No. 17.	

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		Filing Date	October 2, 2001		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1753		
		Examiner Name	Arun S. Phasge		
Sheet	8	of	11	Attorney Docket Number	20174C-002510US

NON PATENT LITERATURE DOCUMENTS			
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